Chapter 4
Monkeys and Apes as Animals and Humans: Ethno-Primatology in Nigeria's Taraba Region

Gilbert Nyanganji, Andrew Fowler, Aylin McNamara, and Volker Sommer

Abstract Nigeria's remote Taraba region harbours a wealth of wildlife. This diversity has been greatly reduced in many locales. We explored local attitudes towards monkeys and chimpanzees through a questionnaire survey, with the goal of identifying factors that may aid conservation measures. This so-called ethno-primatological approach ultimately aims to mitigate the cultural and perceptive isolation of non-local conservationists and primatologists.

Interviewees made clear distinctions between monkeys and chimpanzees. Monkeys reportedly raided crops more often, were more frequently hunted and eaten, and it was more commonly believed that chimpanzees were either protected or should be protected. Widespread folklore credits chimpanzees with human-like qualities. Eating of ape meat is therefore restricted by certain taboos, including an Islamic ban on eating primate meat. On the other hand, chimpanzees are killed precisely because of their human-like character, as their body parts are considered to be powerful ingredients for medicine. Because of their more human-like appearance, chimpanzee babies also make more desirable pets than monkeys. In any case, traditional taboos are increasingly breaking down because of an influx of immigrants from non-Muslim areas, and because of a commercialisation of the bush-meat trade. The sale of a single chimpanzee carcass provides hunters with roughly the equivalent of a month's salary for a government employee such as a national park ranger.

The results revealed at times striking differences between the Cameroon Border Area (more intense agriculture and plantations; largely influenced by Christian culture; cross-border trade activities; relatively remote from the national park) and the Park Support Zone (more pronounced pastoralist activities in the more extensive savannah-woodlands; largely influenced by Muslim culture; greater awareness concerning the existence and function of protected areas, in particular the neighbouring national park). Hunting, display of meat in markets and restaurants, display of primate pets and consumption of chimpanzees and monkeys is more frequently

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reported near the border, where protective laws are both less well known and less appreciated. Some of these differences may be due to a greater reluctance of interviewees living near the national park to admit to the existence of illegal primate killings and bush-meat consumption. However, most of the difference is probably due to cultural practices, more frequent law enforcement and better information about nature conservation in the vicinity of the park. As a result, the decrease in sightings of primates is more dramatic near the border than in the park vicinity. Also, near the border, informants could name an average of only 0.9 locations where primates occur, whereas those residing near the park named 1.3 locations.

Keywords Ethno-primatology • Folklore • Conservation • Primates

Introduction

Western views of "nature" are often based on a romantic perception of pristine ecosystems untouched by humans. This ideal might hold some truth for the depths of oceans and the vastness of Antarctica. However, for the great majority of eco-systems, this view is not correct (Markl 2007). For example, monkeys and apes exclusively populate regions, which are also populated and exploited by humans. Thus, there is geographic overlap with humans wherever non-human primates exist, i.e., these taxa are sympatric (Wolfe & Fuentes 2007). Of course, there are areas in the Amazon, the Himalayas or the Congo basin, into which relatively few humans venture, and then only occasionally. However, the vast majority of monkeys and apes are exposed to anthropogenic influences on a routine basis (Burton & Carroll 2005).

This sympatry can be either beneficial or detrimental for the survival of non-human primates. In some parts of the globe, human activities lead to a localised increase in primate populations as and when people feed free-ranging primates. A provisioned population of Barbary macaques thrives, for example, in Gibraltar. The feeding itself is largely a leisure activity of tourists, who entice and enjoy the human-like antics of the monkeys (Fa 1986). There is some mythical connotation attached to the Gibraltar monkeys, as their presence is said to guarantee the continued British governance of this territory. Provisioning of monkeys is particularly popular in Asia, for example in Japan (Japanese macaques; Kurita 1999) and Taiwan (Formosan macaques; Hsu & Lin 2001), where it is at least partly driven by religious sentiment. A very explicit religious motivation is behind the provisioning of monkeys in south Asia (Bishop *et al*. 1981), such as in India and Nepal (rhesus macaques, Hanuman langurs), Thailand (stump-tailed macaques, long-tailed macaques), and Indonesia (long-tailed macaques). Here, monkeys are cult-objects, and their sacred status connected with the *Ramayana* epic, in which the monkey general assists the God Rama to find and rescue his beloved wife from the hands of a demon, who had kidnapped her (Cadet 1971, Lal 1981, Sommer 1996). Human agricultural and horticultural activity can also make additional food resources available for non-human

primates. This will then often lead to crop-raiding and thus a typical form of human-wildlife conflict (Paterson & Wallis 2005, Warren *et al*. this volume [Ch. 8]).

On the other hand, humans can be the party that exploits non-human primates. Monkeys and apes may, for example, be used as pets, as performing entertainers or in biomedical research (Fuentes & Wolfe 2002). This utilisation does not require that the non-human primate be immediately killed, as it is the case when their body parts are used as a source of meat, as ingredients for traditional medicine, or for fetishist purposes. Primates are relatively large mammals, and as such, are preferred targets for hunters (Fa *et al*. 2002). Interestingly, while there is growing evidence about how primate behaviour and morphology were shaped by long-lasting selection pressure caused by predation from mammalian carnivores, other non-human primates, reptiles and birds of prey (Miller 2002), there is little information on if, and how, continued exploitation by humans might have had similar effects (Wolfe & Fuentes 2007). The way humans prey on non-human primates is often mitigated by cultural factors. For example, peoples in the Manu region of Peru prefer to hunt large primates such as spider monkeys and woolly monkeys. Nevertheless, howler monkeys are sometimes spared, as they are considered to be less tasty and also somewhat lethargic – a characteristic that is feared to be passed on to children who consume their meat (Shephard 2002).

"Ethno-primatology" studies the complex interactions between humans and non-human primates (Wolfe & Fuentes 2007) that grow out of their often-sympatric existence as well as the tendency of humans to anthropomorphise these organisms, which resemble them most closely. We aim to contribute to this emerging discipline through a study of the interconnections of humans and non-human primates in north-eastern Nigeria. Here, humans have co-existed with several species of monkeys and apes for certainly thousands of years, if not much longer. However, the last 50 years or so are likely to mark a turning point in this relationship, as humans are increasingly threatening the very survival of non-human primates. The main causes are an increase in human population density combined with increases in agricultural and pastoralist activities, plus increased exploitation of non-humans as bush-meat through the use of shotguns (Peterson & Ammann 2003; Adanu *et al.* this volume [Ch. 3]).

We conducted a questionnaire survey of local communities in the wider Taraba area to explore the factual knowledge about the natural history of primates and contrasted them with records of traditional beliefs about these animals, which we collected at the same time. We also tried to ascertain the levels of hunting and bush-meat consumption, and if these differ with respect to species. Finally, we tried to assess local attitudes towards conservation. For this, we compared three areas with different levels of legal protection of wildlife and socio-economic background, i.e., the *Cameroon Border Area* (least protected, strong Christian influence), the *Park Support Zone* (medium protection, strong Muslim influence), and *Gashaka Gumti National Park* (GGNP; most protected; sparsely populated, almost exclusively by Muslims).

"Contextualizing myth and folklore combined with detailed assessments of the actual patterns of interactions" might be a helpful approach for primatologists who

strive to encourage "people from places of sympatry" to "cooperate with government officials, conservation and management groups" (Wolfe & Fuentes 2007: 699). Our survey thus aims to contribute positively to efforts to secure the continued existence of non-human primates in north-eastern Nigeria (*Fig. 4.1*). Our particular concern is about the Nigerian chimpanzee (*P. t. vellerosus*), which has its remaining population stronghold in this area (Adanu *et al*. this volume [Ch. 3]). Chimpanzees are the closest living phylogenetic relatives of humans, and may thus merit special attention. Nevertheless, the particular concern for their survival is probably also embedded in a mental "scala naturae", which values organisms more if they resemble humans

Fig. 4.1 Primates of Taraba, north-eastern Nigeria: (**a**) black-and-white colobus, (**b**) mona monkey, (**c**) putty-nosed monkey (**d**) tantalus monkey, (**e**) olive baboon, (**f**) chimpanzee. Monkey photos taken in Gashaka-Kwano (David Bennett [**d, e**], Kate Arnold [**a, c**]; Aylin McNamara [**b**]); the chimpanzees live in the "Pandrillus" sanctuary, Afi Mountains, Cross-River state / Nigeria (photo: Yvonne Pohlner)

more closely (Janson 1952). Research about human attitudes towards chimpanzees is therefore in itself a topic that would merit an ethno-primatological analysis.

Materials and Methods

The questionnaire survey covered areas around GGNP where chimpanzees occurred at least in historic times, although local populations may have already gone extinct. Questions about chimpanzees were contrasted and supplemented with inquiries about sympatric monkeys, i.e., the more terrestrial baboons, patas monkeys and tantalus monkeys, as well as the more arboreal mona, putty-nosed and black-and-white colobus monkeys.

To test for reliability of the respondents, questions were also asked about gorillas, which are not known to occur in the area. The interview technique also aimed to determine whether and how chimpanzees occupy a special status amongst the local human populace. We therefore also collected narratives of folklore, tales and anecdotes (*Appendix*), as well as verbal expressions of attitudes towards the apes, e.g., whether people consider them to be fair game, if they are connected to hunting taboos, and what locals think about conservation.

Information was gathered from Feb 04 – Mar 05 in two major areas: 10 villages and towns in or near the support zone of the national park, and 8 villages and towns near the Cameroonian border (*Tab. 4.1*; *Fig. 4.2*). These areas were likely to reflect

Table 4.1 Location and dates of interviews

Area	Location	Date	Interviews (*n*)
Cameroon Border Area (south-west Taraba)			
	Gembu	10 Apr 05	2
	Buru	09 – 11 Mar 04	5
	Akwame	07 – 09 Mar 04	5
	Abong	05 – 07 Mar 04	8
	Baissa	04 – 06 Mar 04	7
	Bissaula	01 – 03 Mar 04	9
	Ussa	28 – 29 Feb 04	9
	Takum	26 – 27 Feb 04	9
Park Support Zone (west of Gashaka Gumti National Park)			
	Yelwa	30 Mar – 01 May 05	14
	Mai Samari	01 – 02 Apr 05	9
	Mayo Selbe	28 – 29 Apr 04	8
	Bodel	30 Apr 04	3
	Goje	27 – 28 Apr 04	5
	Beli	22 – 24 Mar 05	10
	Jamtari	23 – 26 Mar 05	11
	Jatau	22 – 24 Mar 05	9
	Gidin Dutse	25 Mar 05	1
	Kungana	23 – 25 Mar 05	10

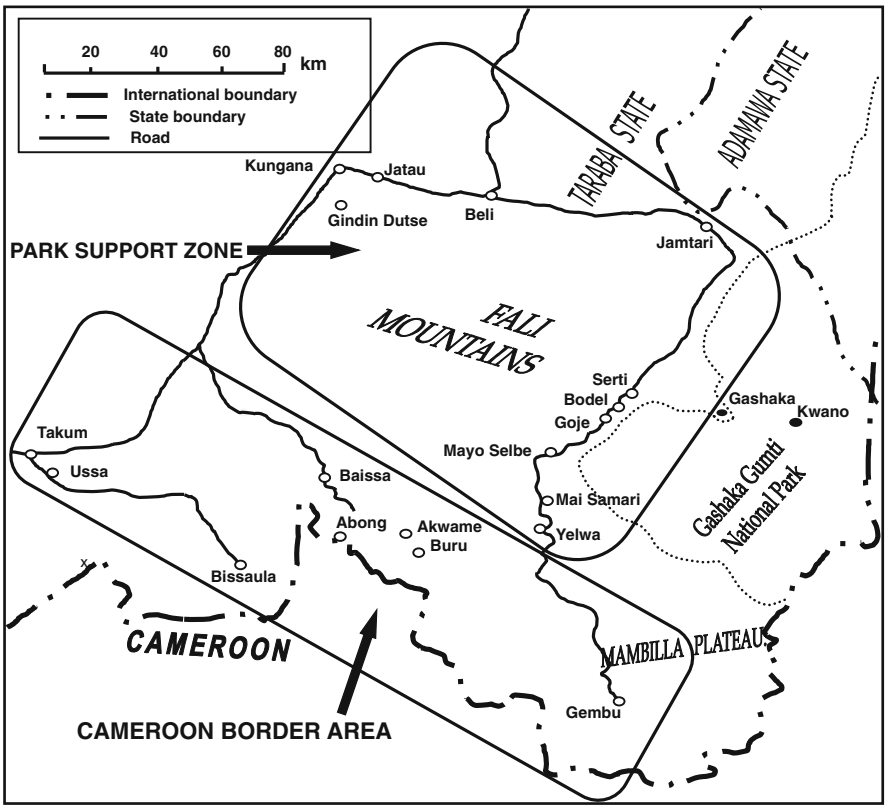

Fig. 4.2 Gashaka Gumti National Park and its geographical positioning in Taraba and Adamawa State in eastern Nigeria with locations of interviews in the Cameroon Border Area and Park Support Zone

different sets of attitudes towards wildlife and its protection. The dominating religion in the support zone is Islam, which instructs followers to observe certain food taboos (including not eating primates), and inhabitants are likely to be familiar with the existence of protection measures towards wildlife. The populace near Cameroon is less familiar with nature conservation measures and more influenced by Christianity, which places less emphasis on food taboos.

The survey focused on groups that might professionally come into contact with wildlife, such as hunters, farmers, forest guards or restaurant owners who sell bushmeat. An attempt was made to balance the composition of the pool of informants (*Tab. 4.2*) with respect to age, status, wildlife-oriented occupation, and religion. Ethnicity varies greatly from locale to locale and could thus not be balanced. Moreover, the societal structures in Taraba are male-centred, and men are more likely to occupy roles that come into contact with information about wildlife. We therefore did not attempt to balance the survey with respect to gender. Most informants were consequently male, except for some women such as restaurant owners who were affiliated with the wildlife trade.

Table 4.2 Demographic characteristics of interviewees

Category	Subcategory	Cameroon Border Area	Park Support Zone
Interviewees	*N*	54	80
Sex (%)			
	Male	96	100
	Female	4	
Age (%)			
	< 20 yrs		1
	20 – 29 yrs	11	9
	30 – 39 yrs	37	35
	40 – 49 yrs	13	24
	50 – 59 yrs	13	13
	60 – 69 yrs	17	13
	70+ yrs	9	6
Religion (%)			
	Christian	65	51
	Muslim	33	49
	African traditional	4	
Status, profession (%)			
	Hunter	38	21
	Farmer	30	45
	Ranger, forest guard	5	15
	Civil servant, teacher	11	11
	Restaurant operator, butcher, bush meat dealer	6	2
	Student, applicant	5	3
	Other (fisher, herb collector, carpenter, chief, business person)	6	3
Ethnicity			
	Tigun	33	1
	Nduro	11	10
	Fulani	4	14
	Mambilla	2	13
	Kaka		13
	Jibu		11
	Kuteb	11	1
	Jukun	9	5
	Tiv	2	5
	Chamba		5
	Ichen	7	
	Kambu	2	4
	15 other tribes	19	19

During the survey, laminated colour images (obtained from Kingdon 1997) of the following primates were shown to informants: baboons (“gogo”, in Hausa-Fulani), patas monkeys (“jambiri”), tantalus monkeys (“kirikaa”), mona monkeys (“gimchiki”), putty-nosed monkeys (“bakinbiri”), black-and-white colobus (“biri mai roro”),

chimpanzees ("biri mai ganga"). While gorillas do not occur in the area, they were included as a control to determine the reliability of responses.

The questionnaires recorded date, location, basic information about the respondents (sex, tribe, age, religion, status / occupation), and whether or not the interviewer deemed the respondents reliable.

A first set of questions gathered semi-quantitative information on the occurrence of non-human primates in the area:

- Have you ever seen "with your own eyes" one of the following animals (represented by the laminated image)?
- Can you name the animals from the picture?
- Date of last sighting < 12 months or > 12 months?
- Give more accurate date if possible (day / month / year).
- Location of last sighting.
- How many animals have you seen?
- Is this your only sighting of this animal?
- If "no", where have you seen this animal before?
- Have your sightings of this animal increased or decreased since you have lived here?
- How far from the village (km, miles – provide scale) do these animals live?
- Which animals do raid crops? How much damage is done?

Other questions ascertained if respondents could discern monkey-specific behaviours from those of chimpanzees, such as nest-building, pant-hooting and drumming of buttress roots:

- Which of these animals is building a nest in a tree?
- Which animal cries out loud and drums?
- What do you know about chimpanzees? What do they do?
- If informant knows about drumming: How do chimps produce the sound?
- What do you know about the other animals?
- What do they do?

A final set of questions elicited information about hunting practices:

- Have you ever seen one of these animals dead?
- Have you ever seen adult animals or baby animals as pets?
- Have you ever seen baby animals for sale? Price?
- Which of these animals is hunted or killed?
- How is it hunted or killed (snare, trap, arrows, guns)?
- Have you ever hunted or killed one of these animals?
- Which of these animals is eaten?
- If "no": Why is the animal not eaten?
- Have you ever eaten any of these animals?
- Which meat is best?
- How expensive is the meat?
- Do these animals transmit diseases?

– Which of these animals do you believe is protected?
– Which of these animals should be protected?

The interviewer also recorded *ad libitum* other observations at the site, which seemed relevant to the topic (for example: Is bush-meat sold in the local market or served in restaurants? Are people carrying guns?).

The information was recorded in as near to the narrator's own words and style of telling as possible. The following guidelines concerning interviewing technique were adhered to:

– "During interviews, do not convey the impression that you are there to implement any conservation policy because people might be afraid of that."
– "Avoid asking leading questions, which would allow people to give you an answer they think you may want to hear."
– "Many answers may have nothing to do with the truth, and informants may well say what they think you want to hear. Just report what people say, but indicate whether or not you judge the information reliable."

The questionnaire survey was implemented by GN of NCF Gashaka, a native of the Mambilla Plateau, fluent in several local languages, who – as a completing undergraduate student in biology from Maiduguri University – had the educational background for such a task. The data were jointly analysed by the authors.

Results

General Knowledge About Monkeys and Apes

A large proportion of interviewees in both Cameroon Border Area and Park Support Zone reported having seen chimpanzees (85 %) or the 6 monkey species (73 %) about which questions were aimed (*Tab. 4.3: Q1*; *Fig. 4.3*). Nobody claimed to have seen gorillas – which do not occur in the area – indicating that the reports have a certain degree of reliability.

The good acquaintance with primates may be due to the fact that about 80 % of interviewees were hunters, farmers, rangers or forest guards who are likely to come into contact with wild primates (cf. *Tab. 4.2*). Wild apes are normally only seen by hunters or forest guards. Many sightings of chimpanzees therefore certainly refer to captive animals that are for sale or kept as pets.

The arboreal colobus, mona and putty-nosed monkeys were seen with lower frequencies than the more terrestrial tantalus monkeys and baboons. The much higher proportion of patas monkey sightings in the Park Support Zone is due to the fact that these terrestrial monkeys inhabit savannah-woodland, which is less prevalent near the Cameroon border.

Overall, sightings and general knowledge about primates were more pronounced near the park than the border. Inhabitants of the Park Support Zone had seen both

Table 4.3 Main interview questions: overall results for chimpanzees compared to average for 6 monkey species

		Chimpanzees				Monkeys			
Category	Question	C	P	Mean	test	C	P	Mean	Test
General knowledge									
	1. Have you ever seen this animal?	78	93	85	*	68	79	73	***
	2. Can you name the animal from the photo?	78	90	84	*	66	78	72	***
	3. Does this animal cry out loud and drums?	77	90	83	*	0	0	0	ns
	4. Does this animal build a nest in a tree?	76	89	83	ns	1	0	1	ns
Hunting									
	5. Have your sightings of this animal increased?	15	30	22	*	10	38	24	***
	6. Ever seen one of these animals dead?	67	46	56	*	94	69	82	***
	7. Is this animal hunted?	67	64	65	ns	94	83	88	***
	8. Have you ever hunted or killed this animal?	24	5	15	***	60	31	45	***
Consumption and trade									
	9. Is this animal eaten?	40	50	45	ns	96	87	91	**
	10. Have you ever eaten any of these animals?	7	12	10	ns	57	43	50	***
	11. Have you ever seen baby animals for sale?	67	3	35	***	37	17	27	***
	12. Ever seen adult or baby animals as pets?	69	45	57	**	55	28	42	***
Attitudes towards protection									
	13. Does this animal raid crops?	5	5	5	ns	74	60	67	**
	14. Do these animals transmit diseases?	2	11	7	*	0	0	0	ns
	15. Do you believe this animal is protected?	100	92	96	ns	26	90	58	***
	16. Should this animal be protected?	62	95	78	ns	14	91	52	***

C = Cameroon Border Area = 54 interviews; P = Park Support Zone = 80 interviews; all figures = % interviewees responding "yes" [or correctly = Q1–4]; values < 100 indicate "no answer" or "don't know"). test = 4-field test, df = 1; ns = non-significant, *$p < 0.05$, **$p < 0.01$, ***$p < 0.001$.

chimpanzees and monkeys significantly more often (*Tab. 4.3: Q1*), could correctly name specific primates significantly more often (*Tab. 4.3: Q2*). Here, significantly more respondents also knew that chimpanzees produce calls and drums (*Tab. 4.3: Q3*) and more knew that chimpanzees construct nests (*Tab. 4.3: Q4*).

Local knowledge about the natural history of primates and chimpanzees in particular is peppered with folkloristic elements (*Appendix*). The common Hausa name for the chimpanzee is "biri mai ganga" – "the monkey with the drum", which refers

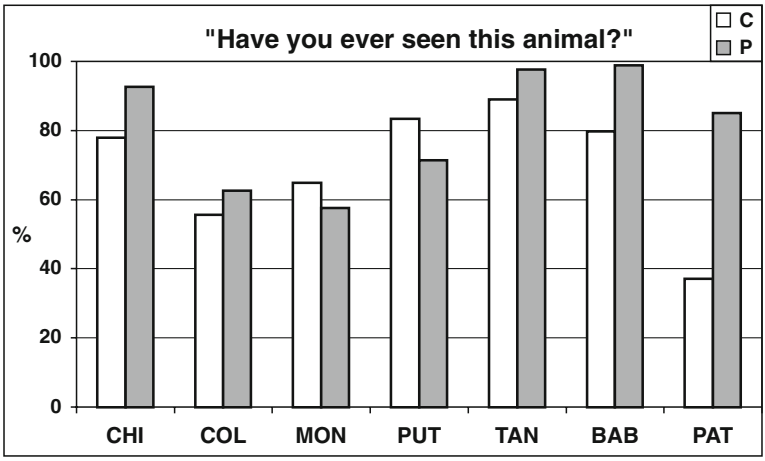

Fig. 4.3 Sightings of primate species. (**a**) Cameroon Border Area ("C", white bars, 54 interviews); (**b**) Park Support Zone ("P", shaded bars, 80 interviews). CHI = chimpanzee, COL = black-and-white colobus, MON = mona monkey, PUT = putty-nosed monkey, TAN = tantalus monkey, BAB = olive baboon, PAT = patas monkey

to the fact that chimpanzees strike the large buttressed roots of trees. According to folklore, such drumming was invented by a chimpanzee man so that his lost wife could find him (*App. [1]*). Drumming is also believed to represent a secret language (*App. [2]*) or is intended to signal that play is over and that it is time to go to sleep (*App. [3]*). There is a kernel of truth in these beliefs, as drumming is indeed probably used by chimpanzees to communicate their presence to each other. Another story maintains correctly that chimpanzees build a new nest every day, to then state that this aims to avoid being bitten by snakes who might settle in an old shelter (*App. [5]*).

More interviewees in the Park Support Zone had seen chimpanzees or monkeys within the last 3 months (*Fig. 4.4*). In addition, primates seem to live closer to human settlements near the park, as indicated by the much higher proportions found less than 10 km away from the village (*Fig. 4.5*). One reason for this could be the more extensive conversion of forests into farmland closer to Cameroon, which reduces the likelihood of spotting any of the more arboreal primates. Moreover, many villages within the Support Zone are < 3 km away from the actual national park where primates are potentially more abundant.

Respondents reported correctly that groups of tantalus monkeys and baboons had the most members. Quite realistic was also that 80 % of all chimpanzee sightings included < 10 animals (*Fig. 4.6*). For all 6 monkey species was true that large groups of monkeys above 25 members were seen more frequently in the Park Support Zone. Overall, these results seem to reflect a reliable knowledge of group sizes of local primates.

Only 10 – 38 % of respondents stated increased sightings of primates, and the higher figures were again significantly more common in the Park Support Zone (*Tab. 4.3*: Q5).

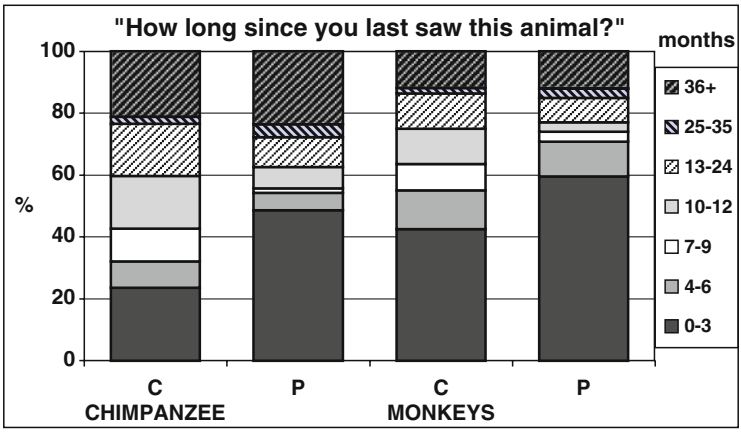

Fig. 4.4 Length of time since last sighting of different primate species (see *Fig. 4.3* for key)

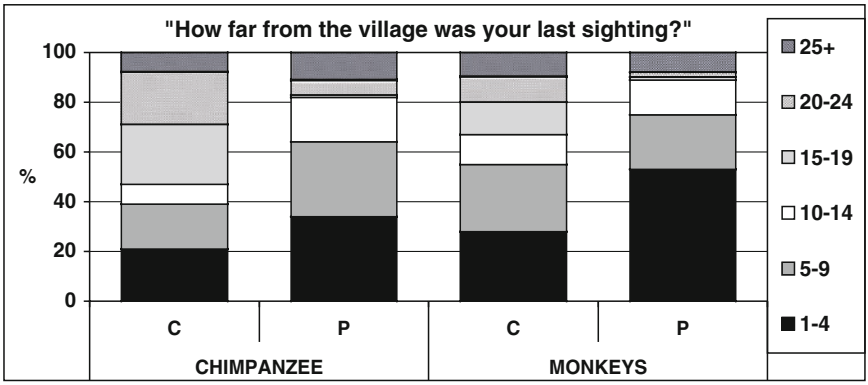

Fig. 4.5 Sightings of different primates: distances from the village of interviewee (see *Fig. 4.3* for key)

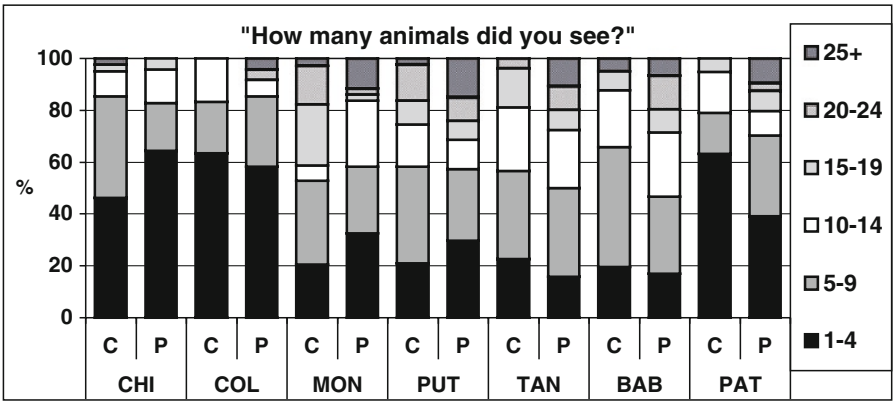

Fig. 4.6 Size of groups for different primate species observed at last sighting by interviewees (see *Fig. 4.3* for key)

Hunting of Primates

Hunting of all species was reported and the majority of respondents had seen dead animals. Hunting pressure is reportedly higher for monkeys than chimpanzees (*Fig. 4.7*). The latter might gain a certain protection from the ascription of human-like qualities to them (see below) as dead chimpanzees had been seen by only 56 % of respondents as opposed to 82 % who had seen dead monkeys (*Tab. 4.3: Q6*; *Fig. 4.8*). Similarly, hunting of chimpanzees was confirmed by 66 % of respondents whereas 89 % confirmed that monkeys were hunted (*Tab. 4.3: Q7*). Moreover, only 15 % admitted to having killed an ape, while the figure for monkeys was three times

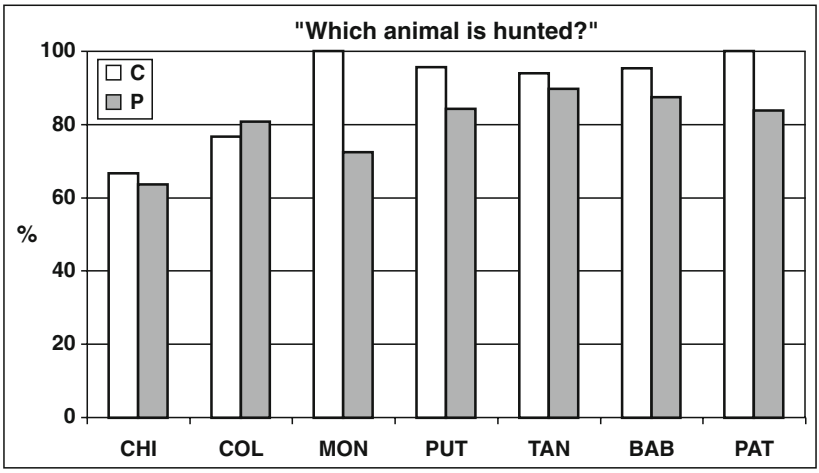

Fig. 4.7 Affirmative interview responses to whether different primate species are hunted (see *Fig. 4.3* for key)

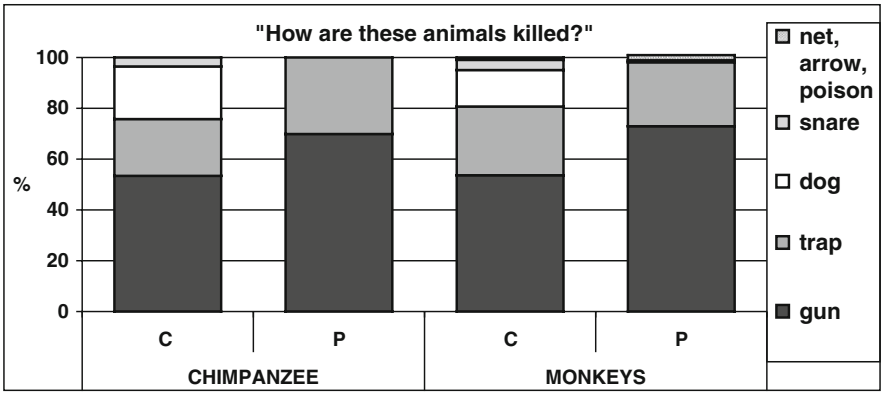

Fig. 4.8 Methods used to hunt different primate species (see *Fig. 4.3* for key)

as high (45 %; *Tab. 4.3: Q8*). Most of the above questions indicated that hunting was more common in the border area (*Tab. 4.3: Q5–10*).

In both areas, guns were the most commonly cited hunting weapon, followed by traps (*Fig. 4.8*). Hunting with dogs only occurred near the border, whereas arrows and poison, however rare, were only used in the park vicinity. Some interviewees said that hunters will stay for days near a water hole they have poisoned, watch which animals drink and then follow them to where they die.

Folklore states that chimpanzee hunting can be a tricky affair, as they dodge weapons thrown at them, to then turn around and use them against their hunters. To avoid this, hunters are advised to capitalise on the ape's tendency to imitate. Thus, a hunter should pretend to stab himself with a spear in the stomach. If the chimpanzee catches the spear, he will intend to launch it back – but not before fatally stabbing himself (*App. [26]*).

In reality, the hunting of chimpanzees follows a rather established pattern, as reported to AF and JA by hunters hired as survey guides in Bissaula: In the evening, from a vantage point, one listens, and if calls are heard, a group of men then quietly enters the bush and sleeps near the nest site or approaches in the night. At dawn, before the chimpanzees leave their nests, the men open fire on the whole group. They can kill an entire party in this way.

Killers of chimpanzees may have to undergo a quarantine, perhaps to purify the hunter from having killed a human-like creature (*App. [27]*). However, in some areas at least, hunters are given honorary titles once they have killed an ape and become celebrities (*App. [28]*), or are entitled to wear conspicuous bird feathers and drink palm wine from a buffalo horn (*App. [29]*).

Bush-meat Consumption

Primates are hunted because of their meat. Chimpanzees are also killed because body parts are used as medicine. For example, ape bones are believed to heal fractures (*App. [31]*), medicine made from chimpanzees can strengthen the body (*App. [32]*) or assist in labour (*App. [34]*), and drinking out of a chimpanzee skull increases intelligence (*App. [33]*). Bush-meat from the survey areas is not only for local consumption but also transported to cities such as Wukari, Jos, Onitsha and Kano.

A difference between monkeys and chimpanzees was also apparent with respect to consumption. Not even half of the respondents confirmed that chimpanzees are eaten by people (45 %) whereas twice as many (92 %) confirmed that monkeys are eaten (*Tab. 4.3: Q9*). Self-reported chimpanzee consumption (10 %) was also much rarer than that of monkeys (50 %; *Tab. 4.3: Q10*).

The likelihood of finding primate bush-meat in the local market is twice as high near the Cameroonian border (*Fig. 4.9*), and more people at the border also say that bush-meat is served in restaurants (51 %) than near the park (36 %). The locally used code name for chimpanzee and other primate meat is "fine boy". However, relatively few respondents were able to state their preference for specific primates. Still, the meat of putty-nosed, tantalus and patas monkeys was rated highest,

whereas baboon meat was less preferred (*Fig. 4.10)*. Mona and putty-nosed monkeys were considered to be the best meat near the border. As they raid the area-typical plantations (see below), they might be killed more often due to human-wildlife conflicts, and their meat might thus be in fashion. Colobus monkeys were the least desirable of the monkeys. Nevertheless, they are also hunted because their skins can be made into trophies, which were seen in several houses in the survey area, or for the manufacture of handbags. Chimpanzee was clearly the least preferred meat.

The prices for monkey meat in the two areas were very similar (*Tab. 4.4*) and, in general, followed the desirability of the meat. Thus, mona monkey was the most expensive, followed by putty-nosed monkey. These two species are often found in polyspecific association and so might also be hunted together. However, the price for chimpanzee meat was relatively high, particularly near the national park. This is surprising considering that ape meat is much less desired.

Fig. 4.9 "Is bush-meat sold in the local market?" Affirmative interview responses (see *Fig. 4.3* for key)

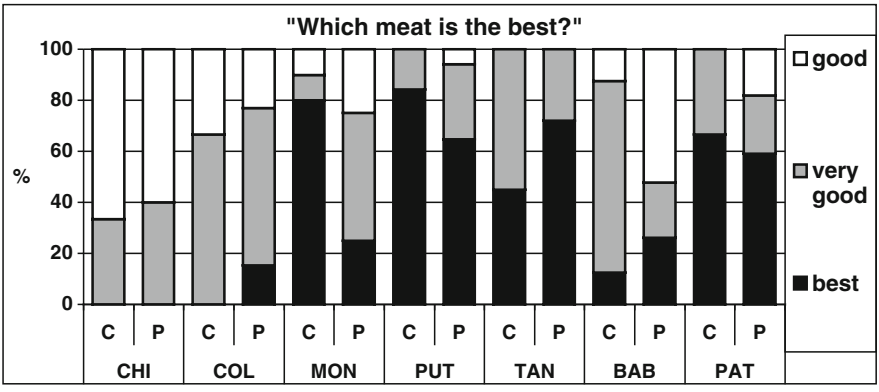

Fig. 4.10 Comparative rating of meat desirability between primate species (see *Fig. 4.3* for key)

Table 4.4 Price of meat for different primate species

Area	Species	Respondents (*n*)	Mean price (Naira) for whole carcass	Median price (Naira) for whole carcass	Minimum price (Naira)	Maximum price (Naira)	Pieces (*n*) in carcass	Mean price (Naira) per kg	Mean price (US-$) per kg
Cameroon	CHI	9	3578	3800	1200	5000	12	110	0.82
Border	COL	18	953	800	400	2500	2	58	0.43
Area	MON	32	859	800	100	1600	2	191	1.41
	PUT	36	867	800	200	2000	2	160	1.19
	TAN	38	814	800	20	1800	2	112	0.83
	BAB	31	2337	2500	300	6500	6	83	0.61
	PAT	15	964	900	60	1800	2	69	0.51
Park	CHI	17	5306	5000	2000	9000	12	163	1.21
Support	COL	26	883	800	300	1800	2	53	0.40
Zone	MON	20	865	800	500	1400	2	192	1.42
	PUT	28	791	800	500	1200	2	146	1.09
	TAN	43	810	800	400	1400	2	112	0.83
	BAB	44	2610	2650	900	3900	6	92	0.68
	PAT	35	864	800	450	2400	2	62	0.46

All prices in Naira, the Nigerian currency (approximate rates for 2004 – 2005; 1 £ Sterling = 250 Naira, 1 US-$ = 135 Naira; see *Fig. 4.3* for key).

People gave several reasons for *not* eating meat of primates, which are re-enforced or reflected by traditional beliefs.

– *The meat is not edible*. This reason ties in with popular beliefs such as that chimpanzee meat may cause an abortion (*App. [24]*).
– *Primates possess human-like qualities*. Human-like traits are not often explicitly credited to monkeys, but a particularly succinct story tells of a patas monkey that extended a helping tail to a lion caught in a pit. The ungrateful lion then attempted to eat his rescuer. Fortunately, a wise turtle taught the lion the ever pertinent lesson to "never threaten any one who has helped you before" (*App. [37]*). In contrast to monkeys, a general theme maintains that chimpanzees were originally humans who were cursed to live in the bush because of bad behaviour, such as abomination (*App. [15]*), fishing on Saturdays (*App. [16]*), quarrelling (*App. [17]*) or simply being stubborn (*App. [18]*). In tune with this topic, chimpanzees are reported to copy human behaviour, by, for example, carrying loads on their head (*App. [7]*), or that they are human-like because they cry (*App. [23]*); use tools to obtain honey or termites (*App. [10]*); share food such as fish (*App. [11]*); or have a refined technique of growing edible maggots on prey carcasses (*App. [12]*). Chimpanzees are also reported to be companions of humans, such as playmates (*App. [14]*) or allies in war (*App. [21]*). (The latter story finds a remarkable modern-day counterpart expressed in the magazine of Nigeria national parks. The author – perhaps tongue-in-cheek – is adamant that

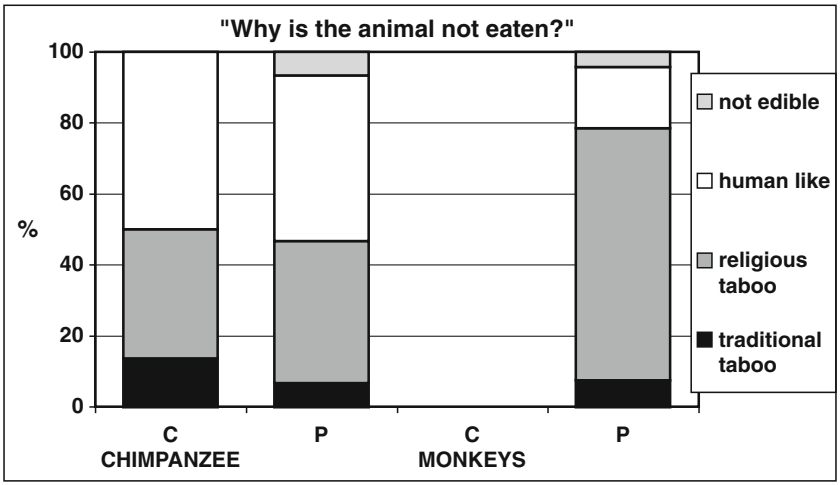

Fig. 4.11 Reasons given for the meat of primates to not be eaten (see *Fig. 4.3* for key)

the export of wild apes from Nigeria has to be stopped as they might be trained by other nations in warfare, which may catch Nigeria by surprise; Wari 2001).

– *Primates fall under Islamic religious taboos*. The Koran specifies that some animals are forbidden to be eaten ("haram"). Primates belong to this category, as they have human-like dentition, ears and eyes. In the Park Support Zone, 49 % of respondents were Muslim, compared to 33 % near the border.
– *Traditional taboos reflect specific tribal beliefs*. The human-ape similarity is stressed in many stories such as that humans have learned midwifery from them (*App. [22]*), that chimpanzees have shown mercy with a hunter (*App. [20]*), or that humans have realised how much chimpanzees are like themselves (*App. [19]*).

No restrictions against eating monkey meat were reported from the Cameroon border, whereas sentiments rooted in tradition or religion exist against eating chimpanzees (*Fig. 4.11*). In the Park Support Zone, these sentiments extend to both apes and monkeys, although human-like attributes are most often cited as the cause for not eating chimpanzees ("eating this animal is like eating a human being").

Primates as Pets

Baboons were the most popular monkeys offered for sale as pets, whereas colobus were the least popular (*Fig. 4.12*). Overall, chimpanzees were reported to be more often on sale as pets (35 %) than monkeys (27 %; *Tab. 4.3: Q11*) and more respondents had seen pet chimpanzees (57 %) compared to pet monkeys (42 %; *Tab. 4.3: Q12*). However, the pet trade of almost all species was significantly more pronounced near the border.

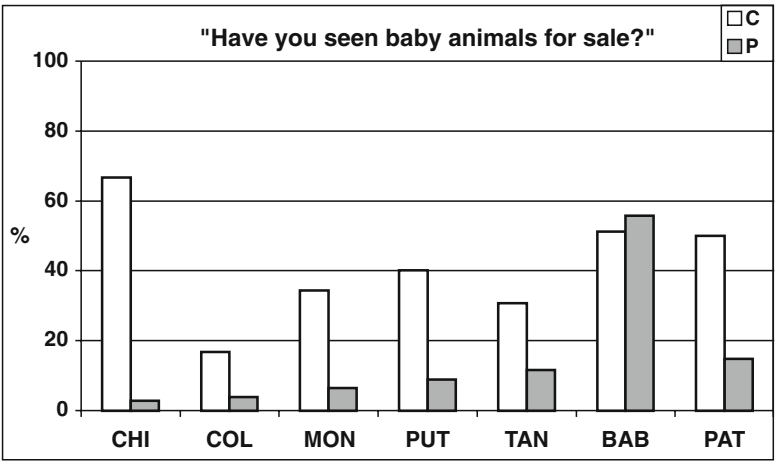

Fig. 4.12 Sightings of baby primates: affirmative interview responses (see *Fig. 4.3* for key)

Attitudes Towards Protection

Many primates species raid crops. Respondents in both survey areas identified tantalus monkeys, baboons and patas monkeys as the worst crop-raiders (*Fig. 4.13*). These species are the most terrestrial and eat crops such as maize, guinea corn and ground nut. Near Cameroon, a higher proportion of respondents perceived mona and putty-nosed monkeys to be crop-raiders. This is due to the different agricultural practices, as the border area has plantations of cocoa, orange, mango, palm nut and cola nut which can be exploited by these more arboreal primates. Folklore maintains that patas monkeys, which invaded a farm found a local brew from which they got drunk – upon which they could all be easily shot (*App. [35]*). It is also generally advised to eradicate crop-raiders such as putty-nosed and tantalus monkeys before starting a plantation (*App. [36]*). In contrast, very few respondents pointed to colobus monkeys and chimpanzees as being crop-raiders (*Fig. 4.13*).

Nobody in either survey area suggested that monkeys transmit diseases, although the majority of respondents said that they did not know. Only few believed that chimpanzees could transmit diseases such as AIDS while most denied this explicitly (*Tab. 4.3: Q14*).

Almost all respondents in both survey areas believed that chimpanzees were legally protected, whereas Park Support Zone respondents were significantly more likely to believe that monkeys were protected (*Tab. 4.3: Q15*). Only about a quarter of people near the border believed that monkeys were protected, with the surprising outlier that over 50 % of people thought that baboons were protected (when, in fact, they are not protected by Nigerian law). People dwelling near the national park were also more likely to state that both chimpanzees and monkeys *should* be protected by law (*Tab. 4.3: Q16*). Interestingly, respondents did not express less desire for the protection of species that raid crops most often, such as tantalus monkeys and baboons (*Fig. 4.14*).

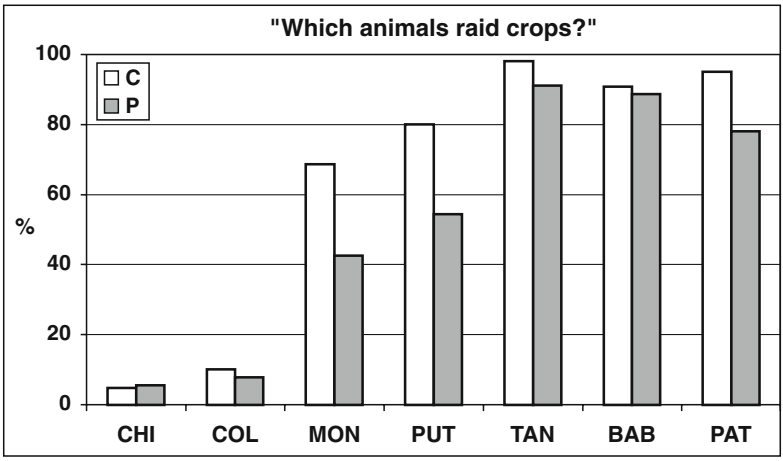

Fig. 4.13 Crop-raiding by different primate species: affirmative interview responses (see *Fig. 4.3* for key)

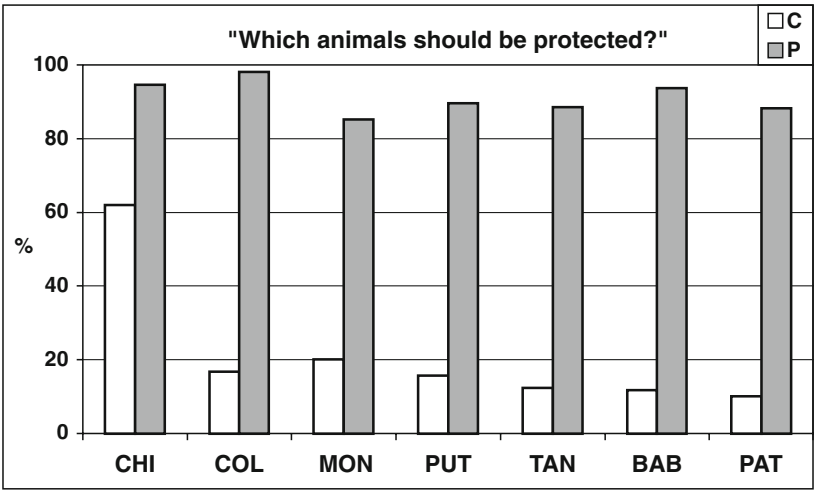

Fig. 4.14 "Which animals should be protected?" Affirmative interview responses (see *Fig. 4.3* for key)

Primate Populations in Taraba State

Respondents mentioned a total of 143 different locations at which primates occurred, 71 for the Cameroon Border Area and 72 for the Park Support Zone. For the 6 monkey species and the single ape species, this amounts to 1399 individual naming of locations. From this we calculated the percentage of locations in which the 7 different primate species reportedly occurred (*Tab. 4.5*), assuming that this provides a rough figure for their abundance.

Table 4.5 Number of locations with occurrence of individual monkey species and chimpanzees reported during the questionnaire survey in Taraba State

%	CHI	COL	MON	PUT	TAN	BAB	PAT	SUM
Cameroon Border Area	15	10	15	17	18	17	8	100
Park Support Zone	15	12	11	12	17	19	14	100
Total	15	11	12	14	17	18	12	100

Total for all species = 1399, i.e., 496 in the Cameroon Border Area and 903 in the Park Support Zone; all values are percentages (see *Fig. 4.3* for key).

In line with expectations, baboons were the most abundant species, occurring in 18 % of all locations, followed by tantalus monkeys in 17 % of all locations. Putty-nosed monkeys were reported from 14 % of all locations, mona monkeys from 12 %, and colobus was the rarest with 11 % of all locations. Patas monkeys averaged 12 %, but there was a clear difference between the Park Support Zone, which harbours much of its preferred savannah-woodland habitat (14 %), as opposed to the more moist Cameroon Border Area (8 %). A similar difference was observed for mona and putty-nosed monkeys, which were more commonly seen near the border, probably because of the greater number of plantations there. Chimpanzees were reported to occur in both the Park Support Zone and the Cameroon Border Area at 15 % of all locations.

If the number of locations are taken as a proxy for primate abundance, then primates seem to be more abundant in the Park Support Zone. Here, 54 respondents reported 72 locations (1.3 / head) as opposed to 80 respondents in the Cameroon Border Area who reported 71 locations (0.9 / head).

The questionnaire survey thus strongly suggests that primate abundance is lower at the Cameroon border as sightings of primates were fewer; they have been seen here less often in the recent past; hunting is more common; meat is more openly available in markets; interviewees report more freely that they have eaten primates; primate pets and primates for sale are more commonly found (see *Tab. 4.3*).

Discussion

Our study aimed to document local attitudes towards primates as well as the extent of hunting and bush-meat consumption in Nigeria's north-eastern Taraba region, not least because this region is the stronghold of the rarest chimpanzee subspecies, *P. t. vellerosus*.

Questionnaires revealed that wild primate populations face severe threats in the wider Taraba region. More than three quarters of interviewees, many of which come into close contact with these animals (hunters, wild-life wardens, farmers), stated that they saw primates more rarely now than in the past (cf. *Tab. 4.3: Q5*). This population decline can be related to a direct force of destruction, i.e., hunting (see below), and an indirect force, i.e., the alteration of habitat through fire damage of forests and cattle grazing (see Adanu *et al.* this volume [Ch. 3]).

Reduction of Forest Habitat

The regime of annual burning and extensive pastoralism have increased the proportion of savannah-woodland against lowland and riperian forest, thus creating vast areas of grassland, particularly at the expense of montane forests (Chapman *et al.* 2004). These dynamics might benefit more adaptable and terrestrial primate species, in particular olive baboons (Warren 2003) and tantalus monkeys. The latter avoid too densely forested areas, whereas baboons can thrive here as well, as long as the habitat is a mosaic of savannah-woodland and forest (see Ross *et al.* this volume [Ch. 9]). For patas monkeys, grassland is the exclusive biotope, and one can speculate if anthropogenic influence might not in fact have led to a wider distribution of this species in Taraba. Fire and grazing reduces, on the other hand, the habitat available to more arboreal primates such as black-and-white colobus, mona and putty-nosed monkeys (cf. *Tab. 4.5*). Chimpanzees also avoid open grassland. They do venture into savannah-woodland, but clearly seem to prefer forests as these provide more fruit and suitable nesting sites.

Hunting

Killing animals for bush-meat consumption has been a traditional source of protein for humans across tropical Africa. However, hunting is no longer a localised subsistence practice but is becoming increasingly commercialised (Wilkie 2001, Fa *et al.* 2003). Subsistence needs and monetary profit also drive hunting in Taraba. Guns were the preferred weapon (cf. *Fig. 4.8*). Although shots attract attention, they kill instantly, whereas snares and traps have to be laid and left. Returning to them brings the danger of being caught if they have been detected and wildlife guards are waiting. On the other hand, traps and snares are easy to conceal during transport and are less expensive than owning a gun and buying bullets. The relatively high frequency of traps and snares reported in the questionnaire survey may have been inflated due to recent tribal disputes. The Jukun and Kutep in particular have clashed near Takum and Ussa since 2002, and the Mambilla and Fulani were in often violent conflict on the Mambilla Plateau since 2003. Consequently, the government has restricted the ownership and use of guns and many have been confiscated, including hunting weapons that have indeed been involved in ethnic conflicts. This has possibly led people to using alternative means of hunting.

A more diverse mix of weapons is used near the border, including dogs. Not many dogs are owned in the Park Support Zone, perhaps because they are known to be used by hunters and so would attract attention from the park authorities. Instead, the use of poison and arrows was sometimes reported here, perhaps because they are discrete weapons, the arrow being silent and the poison difficult to detect.

Hunting was reportedly much more common in the border area (cf. *Tab. 03: Q6–10*, *Fig. 4.7*). However, the *level* of hunting cannot be ascertained from the results, as the question was binary, i.e., “yes” / “no”. Thus, a few animals killed will give the same

result as a high number. The responses therefore indicate only if hunting occurs or not, but they nevertheless clearly show a higher frequency at the border.

Similarly, bush-meat was more readily available in local markets and restaurants near the Cameroonian border (cf. *Fig. 4.9*). The finding might simply reflect that it is not illegal to sell bush-meat here whereas it contravenes the law near the national park. This would affect the level of meat being sold and the level of conspicuousness of meat for sale as well as the number of people who would admit that meat is being sold.

Few interviewees were able to state a preference for specific primate bush-meat, which reflects the difficulty of recognising species. As the meats are all smoked and dried together, few distinguishing features such as skin, hand, tail, head and feet are left on the sections of carcass that are sold. Only sometimes is the tail or head kept to verify the species. Moreover, hunters may present meat as that of another animal so that it can be sold at a higher price. Therefore, people may not know what type they have really eaten, nor indeed what is available. These circumstances go some way toward explaining why chimpanzee meat is more expensive than its low ratings for desirability suggest (cf. *Tab. 4.4*), as chimpanzee meat is often passed off as buffalo, which fetches a higher price. Therefore, chimpanzee meat is rare and the few people who specifically want to buy it – perhaps for medicinal or fetishist reasons – will find its price inflated.

Chimpanzee males weigh on average 43 kg (range 33 – 57 kg) and females 36 kg (range 28 – 49 kg; review in Sommer & Ammann 1998), yielding an average of 40 kg per ape. Killed animals are typically simply hacked into pieces, which means that lumps of bones, intestines and meat are sold together. A kg of ape meat sells for the equivalent of 0.8 – 1.2 US $ (cf. *Tab. 4.4*). A whole carcass is thus worth about 40 US $ or 5400 Naira, which, in a rural setting, is equivalent to a modest monthly salary. Killing a chimpanzee is therefore certainly worth a hunter's while, and much alternative incentive would be needed to stop a hunter from practising his trade.

Pet Trade

In many range countries, primates are traded as pets (Cowlishaw & Dunbar 2000). About half of our survey respondents had seen infant primates for sale, and about a third had seen primate pets, with chimpanzees being more popular than monkeys (cf. *Tab. 4.3: Q11–12*, *Fig. 3.12*). It has to be emphasised that the trade in chimpanzee babies is a by-product of the trade in chimpanzee meat (Teleki 1980, Peterson & Ammann 2003, Hughes *et al*. this volume [Ch. 14]). Infant chimpanzees sleep in nests with their mothers, or are transported clinging to her stomach. It thus sometimes happens that when the mother is killed, either in the nest or fleeing, the infant may not be directly hit. If it survives the fall to the ground, it may be collected alive for sale as a pet. Most probably all of the infant chimpanzees offered for sale in markets are obtained in this way, as it is difficult to selectively shoot mothers just to retrieve the infant. The vastly greater likelihood of seeing baby chimpanzees for sale near the Cameroonian border must therefore correlate with a vastly higher level of chimpanzee hunting.

Hunters like to draw attention to their exploits by bringing back baby chimpanzees to a town or village, where many inhabitants will go to see it. The preference

for chimpanzees as pets and for sale is probably related to the fact that apes are more attractive to people than monkeys because of their greater resemblance to humans. Another factor is the likelihood of survival in captivity. This might explain why colobus monkeys are rarely seen as pets as it is difficult to provide the appropriate folivorous diet (Cowlishaw & Dunbar 2000). Baboons are the most popular pet monkey. Because they are omnivorous (e.g., Warren 2003 for Gashaka baboons), they are more hardy and tend to survive in captivity for a long time.

Smuggling of primate pets is widespread in Nigeria. The animals are sedated with drugs and infants can then be moved by public transport on the smuggler's stomach, who will simply wear a big coat over them to avoid arousing suspicion (cf. *App. [30]*). They are usually brought from places such as Baissa and Bissaula to Jos, Kano and other urban areas from where they often find their way to Europe or Asia (Sommer & Ammann 1998, Peterson & Ammann 2003).

Food Taboos

Many interviewees stated that primates and in particular chimpanzees fall under Islamic religious taboos and should not be eaten (cf. *Fig. 4.11*). Indeed, in those locations of Taraba with a greater Muslim influence, self-reported killing or consumption of chimpanzees was lower than in areas with predominantly Christian (or traditional African) influence (cf. *Tab. 4.3: Q8–10*).

From this one might conclude that religious or spiritual traditions can aid modern conservation goals. Surely, the preponderance of monkeys such as langurs and macaques in many Indian cities, towns and dwellings is a simple function of the population being overwhelmingly Hindu, who consider monkeys to be sacred (Sommer 1996). However, such religious conviction is rarely ecologically informed or indeed cares about the well-being of animals. Instead, believers are driven by their own selfish desires not to be punished for acts conceived to be against divine law. The prevalence of Hinduism on the Indian subcontinent has therefore not stopped the widespread destruction of natural habitat of wild animals (Sommer 2001). Similarly, while local Islamic practice discourages the *eating* of primates, it does not impose much of a restriction on the *killing* of primates for further sale of the meat, a logic that also holds true for the hunting of wild pigs. Thus, hunters and poachers of primates who are Muslim can be found in Taraba.

In any case, sentiments against eating primates seem to be weakening in the Taraba region. Several respondents noted that primates, especially chimpanzees, were not consumed in the survey area until fairly recently. Some interviewees explained how this practice has been introduced with the increase of population and the inward migration of new tribes. A chief hunter near the Cameroon border stated that "people never used to eat chimpanzee before. Only the Ibos and the Jukun ate them, but now many other tribes are eating". It is likewise possible that respondents will say one thing but do another as fewer admitted to having eaten primates compared to those that said primates were eaten by other people (cf. *Tab. 4.3: Q9–10*). This discrepancy might reflect the religious stigma attached to admitting to the consumption of primates.

There seems to be a similar stigma attached to hunting chimpanzees, given their human-like characteristics, as successful hunters may sometimes have to undergo a period of quarantine before they become celebrities for having killed an ape (cf. *App. [27]*). Such practices resemble purification rituals of warriors who kill other humans in battle. In this respect, it is important to note that, whereas some do not kill chimpanzees because they are human-like, others kill them for precisely that reason, since their human likeness either brings special status to the hunter, or the products of the dead chimpanzee, such as the hands or skull, may accord special powers to humans. People in Sierra Leone who were interviewed about attitudes towards conservation expressed concern that protection of chimpanzees was a scheme to cover up "chimpanzee business". According to this belief, power-seekers murder people to obtain their body parts to make "bad medicine", which confers political or economic powers. They do this through shape-shifting, magic powers or by disguising themselves as chimpanzees and using special knives that simulate bites done by the actual animals (Richards 2000). Animals such as chimpanzees can thus become stigmatised as human groups use them to define group boundaries (Douglas 1966).

It is therefore questionable if religious or mythological convictions alone (NCF / WWF 1995) can be an effective tool in conservation strategies. Still, there can be little doubt that the tendency of humans to anthropomorphise monkeys and apes can create not only certain inhibitions against killing them, but also a desire to see them living. This is certainly the case with the average viewer of nature documentaries. The insight that "television programmes can be a powerful means of raising awareness and triggering action to solve conservation problems" has led to ideas such as "The Great Ape Films Initiative", which screen films about non-human primates in habitat countries so that these can be seen "by the people who live and work in the places where the animals are and by decision-makers who control the fate of those habitats" (www.nutshellproductions.co.uk / gafi; accessed 12 Sep 08). It seems as if the persuasive power of such presentations (Westwood & Redmond 2008) rests less in references to mythology than in rather spontaneous empathy for human-like creatures. One would think that such "instinctive" empathy would have to be paired with an enlightened attitude about the dangers of eco-system destruction to trigger sustainable conservation initiatives. Such a state of mind seems to motivate many primatologists who have made conservation their personal and professional agenda.

Protected Areas and Law Enforcement

The questionnaire survey showed that people in the vicinity of the park had a greater awareness than inhabitants of the area near the Cameroonian border that Nigeria has laws protecting wildlife (cf. *Tab. 4.3: Q15)*. However, this finding might be due to the fact that people near the park may want to please the interviewer by displaying a more conservation-oriented attitude. Moreover, Park Support Zone inhabitants might deny that primates are illegally killed or that chimpanzee babies are available for sale because there is a greater risk of punishment for such activities than in the

border area. Compared to the border zone where hunts are openly carried out and discussed, hunting near the park (and in the park itself) is a secret activity.

Nevertheless, other factors make it likely that at least some of the differences are "real", reflecting a greater reluctance of Park Support Zone inhabitants to be involved in the illegal trade in primates, and in particular chimpanzees, be it out of fear of punishment or because of moral or religious conviction. Even though hunting is not illegal in the Park Support Zone itself, licenses for hunting within the vicinity of the park have been revoked by the government. The consequences of being caught with meat or hunting equipment are as serious as if they were found in the park – the assumption being that any activity outside the park is strongly suggestive of similar activity within the park. Thus, hunting comes with a higher risk that people may not be prepared to take. In contrast, in the Cameroon Border Area, hunting permits can be bought from the state government Wildlife Department. However, even though it is a requirement, most hunters do not buy licenses as the risk of being caught and the fines involved are low.

In sum, it is important to realise for even the most idealistic conservationist that "nature" is "cultured" by humans (Markl 2007), and has been so for a long time, at least in places such as north-eastern Nigeria. Thus, like it or not, natural processes alone do not any more ensure suitable conditions for the desired biodiversity in reservoirs such as GGNP. Such places will thus be in an increasing need of "management" (Ausden 2007). The ethno-primatological approach can help "to overcome the cultural and perceptive isolation" of non-local conservationists and primatologists (Wolfe & Fuentes 2007: 700) and in this way assist conservation efforts by incorporating the challenges and opportunities embedded in local traditions and attitudes towards wildlife.

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Appendix. Folklore About Chimpanzees and Monkeys in the Taraba Region, Nigeria

Based on interviews with local people, 2004 – 2005, by GN (*Tab. 4.1*). Narrated by GN to AF, transcribed by AF, and edited by VS (Apr 05). It was intended to preserve some of the traditional mode of storytelling.

Interpreting Naturalistic Behaviour of Chimpanzees

The Meaning of Drumming

[1] *A chimpanzee invents drumming to find his wife*. Told in Baissa. A chimpanzee was living with his family, and there was a shortage of food. So, he told his family that he would go and look for food. He said he would leave marks on the road, which they could follow in case he didn't come back. On his travels, he discovered a place with plenty of food and thought it would be good to transfer his family to that area. When he did not return, his wife decided to follow him as he had said. So, she followed but could not find him. And he was also looking around for her, because she had left the home. So, he decided to invent drumming. When she heard this, she knew it was him, and she went to find him. The drumming became a sign of contact and is also a sign of a good place to sleep. It is usually the male chimpanzee that drums and the females do the crying.

[2] *Drumming is a secret*. The drumming of the chimpanzees is a secret of the chimpanzees. That is why it is very difficult to discover.

[3] *Drumming tells everybody to go to sleep*. Told in Mayo Selbe. Drumming is a sign to show that playing is over, so everybody should go to sleep, and we will meet again tomorrow.

[4] *Drumming foretells death in the village.* Told in Abong. In the olden days, it was believed that when chimpanzees come very close to the village and cry and beat buttresses, this is a big sign that an adult from the village will die, and this will have to happen whether the person was sick or not. But nowadays, because of hunting pressure, the chimpanzees have all moved from close to their home and people no longer hear their cries.

Why Chimpanzees Build Nests

[5] *Chimpanzees avoid snake-bites*. Told in Bissaula. In those days, the chimpanzees normally spent many nights in each nest. They were suffering to make a new nest every night. So, one day, the chimpanzees went back to stay in a previous nest because they didn't go away too far. That afternoon a snake had invaded one of the nests. So, when the leader of the group went up to sleep, he was

bitten. From that day, they all learned their lesson: that it is not good to use a nest more than once, because a snake might be there. And they passed the message around, and that has continued until this generation.

The Human Nature of Chimpanzees

Human-like Qualities of Chimpanzees

[6] *Chimpanzees are afraid of guns*. Told near Akwame. If you point a gun at a chimpanzee, it will cry and shout, so chimpanzees behave like men.

[7] *Chimpanzees copy human behaviour*. Told near Akwame. Normally, in the old days, when a man was going to cut palm nuts, he left them near the trees for a few days for the water to reduce. When he went to collect them, he went with his wife. The woman would carry the bunch on her head. Usually the man would be holding at least two spears on his shoulders. In many instances in this village, female chimpanzees were seen carrying a bunch of nuts on their heads, and the male would break two sticks and carry them on his shoulders. This shows that the chimpanzees copy what human beings do exactly.

[8] *Chimpanzees do not raid crops*. Told in Bodel. According to the Jibawa people, chimpanzees are not known for crop-raiding or any damage on the farm. In the event of such on anybody's farm, it means the farmer has a problem, which he has to settle, and if he fails to do so, calamity will follow.

[9] *Chimpanzees forage like humans*. Told in Yelwa. The chimpanzees behave like human beings, using hands to fetch water and leaves sometimes. They use their hands to make the nest.

[10] *Chimpanzees use tools and share food*. Told in Bissaula. The chimpanzees also do group work like human beings. So, when they get food, they call out and wait for others to come around. It is normally honey or termites – which they hunt, using sticks. They will first give to the younger ones, then they will share it.

[11] *Chimpanzees fish and share the exploits*. Told in Gashaka. Chimpanzees fish from rivers. They toss all the fish to a leader chimpanzee who collects them and shares them out afterwards.

[12] *Chimpanzees grow maggots for food on hunted carcasses*. Told in Baissa. When chimpanzees kill an animal, antelope or something, they don't eat it. They cover it somewhere with leaves. A few days later, they will go on their normal hunting. At exactly the time that the maggots start forming in the dead animal they will come back to the same place and feast on the maggots. So, the chimpanzees do not eat the flesh. If human hunters find a pile of grass under which chimpanzees have hidden a killed antelope, they will take the prey but remove the intestines and leave them there to form the maggots for the chimpanzees. Also, when humans hunt, they will also leave intestines of their prey animal on a stone for the maggots to form for the chimpanzees.

[13] *Chimpanzee mothers hide insubordinate sons from the father*. Told in Baissa. It is in the culture of chimpanzees that when the female gives birth to a male chimpanzee, she will have to separate from the father to raise the male child because the young male chimpanzees are always insubordinate to their fathers. So the mother would always carry the male chimpanzee on her stomach and if it is a female, on her back. The reason for carrying the male on the stomach is so that the adult male will not see the private parts of the young chimpanzee. The male is kept by the mother until he grows, then he separates from her.

[14] *Chimpanzees as friends of humans.* Told in Bodel. In the past the Jibawa people used to make friends with the chimpanzees. They would go to the forest to play with the chimpanzees. The chimpanzees used to know them.

How Humans Came to Live in the Bush as Chimpanzees

[15] *Chimpanzees are humans cursed for abomination*. Told in Yelwa. Once upon a time, there was a newly married couple. The woman was left at home to cook while her in-laws went to the farm. So her mother-in-law gave her ingredients to make soup, including salt. But she misplaced the salt, so instead of waiting for the salt she replaced it with honey and sugar cane in the soup. She tasted it and it was sweet, so she knew that her mother-in-law would not like it. So she went to her mother-in-law's calabash that was placed on the top shelf in the kitchen. Inside the calabash she found some salt and added this to the sauce. She then took the food to the farm. The calabash, from which she took the salt, was not supposed to be used by anyone except the mother-in-law. So the calabash followed her to the farm. The woman knew that if she went to the farm with the calabash she would be queried, so she stopped and broke it with a stone. And then she threw the pieces in the river. She continued to the farm. By the time she reached the farm, the calabash fragments had reunited and it went down the river to the farm, arriving at the same time as the woman. So the people in the farm, including the mother-in-law, saw her and the calabash and worked out what had happened. Now, it is an abomination for a daughter-in-law to use the calabash of her mother-in-law without permission. So, as a result of this, everybody on the farm was transformed to chimpanzees. And they never came back home.

[16] *Chimpanzees are humans cursed for fishing on Saturdays*. Told in Takum. Monkeys, especially chimpanzees were formally human beings. So, when they were still people, there was a rule from God that no one goes to fish on Saturday. These chimpanzees, the first people to turn to chimpanzees, had a shortage of soup in the house to cook for the family. So, they went to fish on Saturday. Then, God found out and punished them to remain in the bush as chimpanzees. So they are shy because they cannot come back to be with the people.

[17] *Chimpanzees are humans cursed for quarreling amongst themselves*. Told in Mayo Selbe. Chimpanzees were formerly people before they were separated from normal human beings. Before that, there was a big misunderstanding and they could not resolve this problem. So, some of the group got so annoyed

with the other group and decided to stay in the forest away from other people. The ones who were annoyed went to the forest, carrying along their ugly faces with them. This is why the chimpanzees look as they do. After the separation, they also found a way to cut communication with the other people. So that is why the chimpanzees understand only themselves and cannot speak like normal humans. Using human language would be like bringing back the problem.

[18] *Chimpanzees are stubborn humans living in the bush*. Told in Baissa. The Ndoro people respect chimpanzees because chimpanzees were formally their early fathers or ancestors. It is their stubbornness that caused them to be separated from the new people now. That is why they remain in the bush.

Taboos and Customs Surrounding Hunting of Chimpanzees

Why Chimpanzees Are Not Hunted or Eaten

[19] *Humans realise that chimpanzees are like themselves*. Told in Baissa. Chief says his forefather used to say that chimpanzees are like humans, they will do anything people do. In 1950 he went to the farm with his father and heard the chimpanzees crying and drumming, and his father told him that these were also human beings but they live in the forest. So they went to see what the chimpanzees were doing. When they got there, the people sat down, the chimpanzees sat down, the people stood up and so did the chimpanzees. So his father told him, chimpanzees are human beings and should not be hunted.

[20] *A chimpanzee shows mercy with his hunter*. Told near Akwame. People used to hunt primates including chimpanzees in a group. They cut down trees in the forest to create a gap between the trees so the chimpanzees would not jump from one tree to the other. One day when they went hunting, one of the stubborn chimpanzees climbed up a big tall tree. All the styles to bring him down were abortive. So one of the young men climbed the tree so that he could disturb the chimpanzee and make him jump down. When the man went up, and got close to the chimpanzee, the chimpanzee quickly grabbed him and held him out trying to throw him down. The people on the ground started shouting and begging so the chimpanzee did not throw down the man. And the man was allowed to come down from the tree without being hurt. From this experience, they decided not to hunt chimpanzees again.

[21] *Chimpanzees can be allies in war*. Told in Ussa. People here believe the chimpanzees are strong and will help them during war when their enemies attack them. So they shouldn't kill or eat them.

[22] *Chimpanzees practice midwifery*. Told near Akwame. Tradition and culture of the Ndola people do not permit the eating of chimpanzees because in the early days, women were having problems in child bearing. So one day, a hunter spotted a chimpanzee giving birth, and the chimpanzees cut a leaf, which the mother

chimpanzee slept on. That knowledge was brought to their community, and so they do the same. If they do this, the woman will have a successful birth.

[23] *Chimpanzees cry like humans*. Told in Abong. A man went hunting in the seventies along the Nigeria – Cameroon border. He saw a chimpanzee and pointed a gun to shoot it. The chimpanzee did not run away but started to cry and shout. This behaviour is just like a human being, so he was discouraged and told his boys who also saw the action. From that day, they do not kill chimpanzees.

[24] *Chimpanzee meat causes abortion*. Told in Mayo Selbe. It is believed back in Ibo land that when a pregnant woman eats chimpanzee meat, it will cause an abortion.

[25] *Killing chimpanzees brings bad luck*. Told in Takum. If you kill a chimpanzee, you are likely to fall sick and if proper care is not taken, you may possibly die. Killing a chimpanzee will also get a hunter bad luck. So you won't easily kill any other animals.

Hunting Customs

[26] *Killing chimpanzees, capitalising on their imitations of human behaviour*. Told in Bissaula and Buru. The chimpanzees are like humans, but they are limited in mental ability and very difficult to hunt. There have been cases of chimpanzees in the bush using the same bow and arrow to shoot back at the hunters, because the chimpanzees normally dodge arrows and spears. So, to shoot one either by bow and arrow or by spear, you will first pretend to stab yourself in the stomach with the arrow, then shoot the arrow at the chimpanzee. He, being very strong, will dodge the arrow or catch it. When the chimpanzee gets the spear, he will do the same as the man did and stab himself in the stomach as he doesn't have the same control as the man. A similar story is told in Buru. When hunting chimpanzees with spears, you must first try to break the spear using your two hands and the head. This is because the chimpanzees will shoot back at you if you miss the target. But now the chimpanzee will do the same thing they saw you doing, and the spear will break.

[27] *A killer of chimpanzees has to undergo quarantine*. Told near Akwame. His forefathers always thought chimpanzees to be human, because they behave like humans, so if anybody happens to kill a chimpanzee the village will not be happy with that person. Some of the elders will go to the forest to collect leaves, called "Nsu", and these will be placed for the man to sleep on in isolation for some days. The same treatment is given to any man who kills a fellow human being by accident. The person will also sleep on those leaves for several days. Any man in that condition is fed by unhygienic food, which is the punishment for committing murder. This cleans up that person to allow him to associate with other people again. This is always done by people in the village Atta.

[28] *Killing a chimpanzee makes hunters great*. Told in Takum by an Ibo man. In the land of the Ibos, the greatest profession is hunting. These hunters are divided into two categories; the great and the less great. If you are a great hunter, you have killed animals like elephants, lions and chimpanzees, buffalo.

The other hunters are those who kill small animals like antelopes and so on. So, when a man kills any of these big animals, there is a big celebration in the village and his Royal Highness will be invited. The hunter is given a title, "Dinta", and the meat will be shared only among the hunters of that calibre. The skull of that particular animal will be given to the hunter. He will keep it in his house and show it to the generations to come. The remainder of the meat is then shared among other hunters. The hunter who killed that animal is not allowed to sleep in his house for 3 days. Although the celebration for the animal takes place in his compound, he is absent. This time he spends with the other great hunters and herbalists. Some traditional "stuffs" will be done and this will help to prevent any future attacks from the spirits of the forest. This also applies to the Yorubas, where the informant was in attendance at a "Dinta" celebration over the killing of a chimpanzee in 1999, in a village called Omok, Rivers State. Here, farmers do not go to their farms, everybody must stay and be a part of the celebration. If the hunter kills another chimpanzee the celebration takes place at the chief's palace.

[29] *Honours after killing a chimpanzee*. Told at Kob Vobye forest near Buru (recorded by J. D. Chapman in 1978). A hunter who killed a chimpanzee is "entitled to wear the red feather of Ngock, the violet plantain eater, and drink palm wine from a buffalo horn".

[30] *Chimpanzee smuggling in Nigeria*. Told in the Cameroon Border Area. Baby chimpanzees and other primates are usually transported from Baissa, Bissaula and other rural areas to Jos, Kano and other urban areas. The method of transportation involves the use of sedating drugs. The animals are injected or given a tablet, which makes them sleep all the way, without causing problems on the road or game guards or other people finding out. After the drugs are given, some people will carry it on their stomach. And wear a big coat over them and the primates will hold on to them while asleep. So this will not arouse any suspicions, because they will travel like any other passengers.

Medicinal Uses of Chimpanzee Body Parts

[31] *Chimpanzee bones heal fractures*. Told in Yelwa. Chimpanzee bone is used to treat compound fractures. The bone is tied to the area affected and reduces healing time.

[32] *Medicine from chimpanzee bones*. Told in Baissa. The informant's family does not eat chimpanzees. Anybody who does will develop mental illness. When a new child is born in that family, they will soak the bones of chimpanzees in water and the child will start drinking this when he is young to develop the bones. When the child grows up, his bones will hardly break.

[33] *Drinking out of chimpanzee skull confers intelligence*. Told in Mayo Selbe. The skull of the chimpanzee is used as a recipe for brilliance. Before a child is sent to school, a mixture is given to him every morning; the skull and the

hands of the chimpanzee in water. The child will drink from the skull, and when he goes to school, he will be very intelligent.

[34] *Medicine from chimpanzees assists in labour and gives strength*. Told in Mayo Selbe. The skin of a chimpanzee can be used to help a woman who is having difficulty in child bearing. The skin is spread for the woman to sit on top of, before the child-bearing process, and it will thereby be very simple for her. The bones are ground and mixed with some herbs, so when a person takes this mixture he will be very strong and can wrestle. All the heroes in the past were said to have been using these bones before they fight.

Stories About Monkeys

[35] *Hunting drunken patas monkeys*. Told in Ussa. When the informant was young, in the early 1970s, his grandmother had a farm and invited people to come and do community work. To entertain the people who work, a local drink called BKT is prepared from maize. She made this especially strong, so that people would work harder. But, the grandmother had two farms, and her son took the helpers to a different farm. She was preparing the drink at home and then took it to the farm where she wanted the work done. Normally in that farm, they had serious problems of crop-raiding by patas monkey. When she got there and did not see anybody, it dawned on her that she had gone to the wrong farm. So, she left everything there, went to the other farm, a small distance away, and told the workers "No I don't want you to work here, we must go to the other farm". But when she had left the drink there, the patas monkeys were watching her. They entered the farm, drank all and immediately became intoxicated. When the people finally came to work, they saw the farm full of monkeys who were not running away, as they were drunk and falling up and down. So, the people instead of working on the farm, began to kill the monkeys. There was so much meat, some people carried the monkeys away alive. Work could not continue that day because they changed parade. So, they called the woman the "blessed woman" until she died, because only on her farm had this happened.

[36] *Eradicating crop-raiders*. Told near Akwame. The first thing farmers do to farm cocoa is to locate any primates, especially tantalus and putty-nosed monkeys. They will go out at night and destroy the whole group before starting the plantation. Sometimes they get a lot of putty-nose and tantalus in one night.

[37] *Teaching the spiteful lion a lesson*. Told in Ussa. Once upon a time, in the jungle, a lion fell into a pit and he was looking for a way to come out. No one could help him. Many monkeys bypassed him without helping. The monkey with the long tail came by after many animals had refused to help the lion. The lion had been in the pit for some days. So the monkey with the long tail helped him out. But then the lion wanted to eat the monkey. They were still struggling when the tortoise came by and enquired what the problem was all about. And the monkey complained, "I helped this guy when no one would help him. And

now he threatens to take my life". And the tortoise asked how he had helped him. The monkey replied, I got him out of the pit. Then the lion said it was true. The tortoise said he didn't understand, can the lion get back in the pit so he could see how the monkey helped him. The lion got back into the pit. And the tortoise said to the monkey, "Next time you should know those to help". To the lion he said "Never threaten any one who has helped you before".